ISSN: 2635-0807

Perspectives on Trauma

The Journal of the Complex Trauma Institute

Volume 5 Issue 1, 2024

A Theoretical Introduction to Working with Nightmares using Embodied Reprocessing™

Dzmitry Karpuk and Celia Dawson

Abstract

This article introduces the Embodied Reprocessing™ method, a unique contribution and structured framework for therapists to manage and process nightmares (Karpuk & Dawson, 2012; Karpuk, Stoneham & Davies, 2019). This article provides a theoretical introduction to the method. These are excerpts from the manual outlining an up-to-8-session framework that has been regularly taught in the UK and worldwide since 2012. This framework offers therapists a unique contribution by combining embodied, experiential and systemic interventions and tools and understanding for managing and processing nightmares by using proactive techniques and experiential learning to promote healing and reduce re-traumatisation.

1. Introduction to the Embodied Reprocessing™ Framework for Working with Nightmares

1.1. Overview of the Embodied Reprocessing™ Framework for Working with Nightmares

The Embodied Reprocessing™ framework has embedded within it the Cultural-Social Model (CSM) of dreams. This is a novel perspective regarding the nature of dreaming. Also contained with the framework are concepts taken from Hermann/Piaget's three stage model as well as elements from Porges's Polyvagal theory. The net result is a safe and stable model for working with nightmares effectively. The Embodied Reprocessing is a process that helps the body to reprocess the traumatic reactions that it went through and had to adjust. Unlike the body's first experience this time there are supports, understanding, care and attention that help the body to allow the difficulties experienced to be reprocessed.

We will be using an array of systemic, experiential and embodied tools which help facilitate the re-evaluation and reprocessing of problematic sleep disorders – including nightmares. Re-evaluation (or re-authoring) of problematic issues and meaning is specifically aimed at avoiding re-traumatisation and is achieved by anchoring the client in the here and now of experience during the processing stage. Clients are encouraged to shift their attention away from the dream content (report) to the bodily process of dreaming, during which they are supported to manage any distressing embodied memories in the here and now. Essentially the process is to go from a narrative dream interpretation – causing re-enactment of trauma – to the alienated experiences and bodily sensations in the present moment being supported safely. The combination of the Cultural – Social model and the Embodied reprocessing method are a coherent theory and practice system which is delivered throughout the UK in a series of CPD training events.

The Embodied reprocessing framework is suitable for clients with high intrusion and hyperarousal scores, as well as those with high avoidance scores. However, it is also useful for any client interested in exploring their usual dreams. As a member of the gradual exposure methods family, it stands out as a method which addresses traumatic experiences in a very gentle way, working at the level of embodied experiences.

Client Needs	Applicability of Embodied Reprocessing™
1. High Intrusion and Hyperarousal	Suitable for clients with high intrusion and hyperarousal scores.
2. High Avoidance	Suitable for clients with high avoidance scores.
3. Interest in Dream Exploration	Suitable for any client interested in dreamwork.

1.2. The Importance of Addressing Nightmares

There is a significant amount of research reporting that up to 90% of patients with PTSD experience insomnia symptoms, and 50-70% experience nightmares (Koffel, Khawaja, & Germain, 2016; Spoormaker & Montgomery, 2008). A diagnosis of PTSD or CPTSD tends to have nightmares as a core symptom, which contributes to the functional impairment and distress of the individuals involved. Addressing nightmares effectively alleviates significant sources of anxiety whilst also improving sleep quality and enhancing overall therapeutic outcomes (Walker, 2009; Lanius et al., 2001; Mellman et al., 2001). Nightmares are part of the six criteria used to diagnose PTSD and CPTSD (Emmerich, 2017):

1. Intrusion Symptoms: Distressing memories, flashbacks and nightmares.
2. Avoidance: Avoiding reminders of the traumatic event.
3. Negative Alterations in Cognition and Mood: Prevalence of negative thoughts and emotions
4. Alterations in Arousal and Reactivity: Irritability, hypervigilance, and sleep disturbances.
5. Affective Dysregulation: Intense emotions and mood swings (CPTSD-specific).
6. Interpersonal Difficulties: Problems in relationships and social functioning (CPTSD-specific).

PTSD

1. Intrusion Symptoms: Distressing memories, flashbacks, and nightmares.

2. Avoidance: Avoiding reminders of the traumatic event.

3. Negative Alterations in Cognition and Mood: Persistent negative emotions and beliefs.

4. Alterations in Arousal and Reactivity: Symptoms such as irritability, hypervigilance, and sleep disturbances.
PTSD often involves symptoms that occur after some traumatic events.

CPTSD

1. Intrusion Symptoms: Same as PTSD, including distressing memories, flashbacks, and nightmares.
2. Avoidance: Same as PTSD, avoiding reminders of the traumatic event.

3.Negative Alterations in Cognition and Mood: *Persistent and pervasive negative emotions and beliefs.*

4. Alterations in Arousal and Reactivity: Same as PTSD, with symptoms like irritability, hypervigilance, and sleep disturbances.

5. Affective Dysregulation: Difficulty in controlling emotions such as persistent sadness, suicidal thoughts, explosive anger, or inhibited anger.

6. Disturbances in Relationships and Self-Perception: Issues with relationships and a negative self-concept, which are distinctive to CPTSD and not typically part of PTSD criteria. CPTSD includes the core symptoms of PTSD along with additional symptoms that reflect more pervasive and persistent difficulties in affect regulation, self-concept, and relationships. These often stem from prolonged or repetitive traumatic exposure rather than a single event.

Trauma affects the whole human system and is a key indicator of disruptive sleep patterns (Lavie and Kaminer, 1991). A traumatic event inevitably stimulates (but usually over-stimulates) the body, and the brain gets flooded with neurochemicals involved within the survival mechanism. These neurochemicals may keep you alive at the moment of a traumatic event, but there can be a price to pay in terms of the impact of after-effects both on the mind and body. Nightmares can seem like replays of (or re-experiences of) traumatic events, and the body's responses are closely linked to the reactions during the traumatic event.

Trauma is a whole-body phenomenon and the complex system involved generally gets over- stimulated by the release of various neurochemicals involved in the survival process. The cost in terms of after-effects is generally considered the price to pay for survival, and nightmares and negative bodily reactions long after the events are what we are left with to try and restore balance to the system.

We know that many sleep-related movement disorders often accompany other sleep disorders and only sometimes require primary therapy (Silber, 2013). There is a negative somatic effect within sleep-related movement disorders (e.g., Bruxism (teeth grinding), leg cramps, etc.), and research is currently being carried out into the bodily effects of those disorders.

Sleeping and dreaming are vital to good health. Difficulties arise when sleeping is disrupted, and dreams are unwanted. Therapeutic solutions are many and varied and changing all the time, especially with the advent of neuroscience and body-oriented therapy modalities. The key is finding a solution for each individual who seeks help from therapy. Every human being has a different threshold for pain, stress, trauma, or simply coping with life, and there is no one size fits all in the history of the therapeutic process as we are humans and as such unique. The therapeutic end result is generally a compromise. By addressing nightmares, mental health professionals can provide crucial support that is tailored to each individual's unique needs, ultimately promoting better health and wellbeing for their clients.

Sleeping and dreaming are effective indicators of good health, and problems arise when sleep is disrupted, or dreams are unwanted. Neuroscience has pointed the way to more effective solutions in the modern world, and these revolve around the idea that every human is unique and has different thresholds or tolerances for pain or stress. Addressing nightmares is considered one of the key components of a trauma recovery model (Lee et al., 1995).

2. Theoretical Foundations of Embodied Reprocessing for Nightmare Treatment

2.1. Background and Development of the Method & the Evidence Base and Research Support

This framework was developed by a clinical team led by Systemic Family Psychotherapist Dzmitry Karpuk (Complex Trauma Therapists Network in the UK; Karpuk & Dawson, 2012), with contributions from the academic team led by Professor Tom Stoneham (University of York; Karpuk, Stoneham, & Davies, 2019). Karpuk and Dawson developed a novel method for reprocessing trauma-related nightmares and other sleep disturbances called Embodied Reprocessing (ER, previously known as Systemic Experiential Embodied Reprocessing, or SEER). Stoneham, on the other hand, formulated a new theory (the Cultural–Social model) of dreams which explained how the ER method could work.

This collaboration started as a response to a shortage of clinical interventions with Nightmares (Escamilla et al., 2012; Aurora et al., 2010; Foa et al., 2009) and included many other researchers and clinicians, with key collaborators being Dr Robert Davies (University of York), whose research encompasses memory and related phenomena, and Celia Dawson, a psychotherapist specialising in body-focused interventions. Since 2017, the team has worked on numerous projects, including co-designing and co-delivering CPD training workshops, conducting original research (case studies and collecting expected experiences on the application of this method), and producing resources

for therapists. Notably, the Embodied Reprocessing method, which has been regularly taught since 2012.

2.2 The Cultural-Social Model (CSM)

The Cultural-Social Model (CSM) of dreams has provided an alternative view of the nature of dreaming, positing that dream reports are triggered by memories of the nocturnal experience of bodily and environmental changes, including cultural influences and social expectations (Stoneham, 2019). Embodied Reprocessing embraces a series of systemic, embodied and experiential tools which facilitate re-evaluation and subsequent reprocessing of problematic sleep disorders such as nightmares. This works at the level of embodied experience. The combination of CSM with Embodied Reprocessing provides a coherent merging of theory with practice, which is delivered through CPD training events held throughout the UK.

The Cultural-Social model of dreams, developed by Professor Tom Stoneham (Stoneham, 2019), offers a departure from traditional Freudian theories (Freud, 1900/1955). It challenges and rejects three of Freud's fundamental theses:

1. The dreaming process does not influence Dream Content:
According to the Cultural-Social model, the process of dreaming itself shapes or influences the content of dreams. The model posits that dream content is not a product of the unconscious Mind's efforts to fulfil wishes or desires.

2. Dreams Are Encoded into the Memory During Sleep:
This model asserts that dreams are not stored in memory during sleep. Therefore, the dream content is not something that can be retrieved or recalled accurately upon waking.

3. Dreams Are Not Recalled from the Memory During Waking:
Since dreams are not encoded in memory, they are not retrieved or recalled in a traditional sense when a person wakes up. What we remember as dreams are mainly confabulations that we keep reconstructing.

Implications of Confabulation
If dreams are indeed confabulations, this has significant implications:
- The 'retelling or dream deconstruction' of the dream provides no access to the causes of the dream (Rosen, 2013)
- The process of retelling a dream does not offer insights into its origins or underlying causes.

Meaning and Informativeness
Despite rejecting Freud's first three theses, the Cultural-Social model acknowledges that dreams can still be meaningful and informative, albeit in a different way:
- According to CSM, dreams can hold significance or provide information, but not in a manner that directly aids in reprocessing traumatic experiences. The meaning derived from dreams is shaped by cultural and social contexts rather than subconscious drives or memories.

Relevance to Embodied Reprocessing
The Cultural-Social model (Stoneham, 2019) supports the use of Embodied Reprocessing in treating trauma-related sleep disturbances. Focusing on the embodied experiences during dreaming is more beneficial than interpreting the content of dreams (Loftus, 1996). By shifting the focus from dream content, which is shaped by cultural and social contexts, to the bodily processes and managing distressing embodied memories, this process reduces retraumatisation, supporting clients to stay present as much as possible while attending to past memory contents.

2.3. Insights for Treating Nightmares

Stephen Porges' Polyvagal Theory (Porges, 2011) offers significant insights that can be particularly useful for Embodied Reprocessing™, especially when dealing with nightmares associated with trauma. For clients experiencing nightmares, understanding and identifying which state they are in can help them learn to shift from a state of high alert (fight or flight) to a state of safety and social engagement (rest and digest).

1. Regulation of arousal and parasympathetic response: Embodied Reprocessing™ can utilise techniques derived from Polyvagal Theory to help clients manage their physiological arousal. Working with the body using techniques such as breathing and grounding exercises can reduce the intensity of nightmares by modulating the nervous system's response and promoting a state of calm and safety.

2. Teaching clients how to use the Polyvagal Ladder to build their resilience is crucial for clients who experience frequent nightmares. It empowers them with tools to self-soothe and manage distress in healthier ways.

3. The Polyvagal Theory highlights the importance of perceived safety and social connection in regulating emotional and physiological states. Embodied Reprocessing™ involves using therapeutic techniques that strengthen the client's capacity to engage with others and feel safe, which can be pivotal in processing traumatic dreams.

4. Trauma Release: Nightmares often serve as a replay of traumatic events or as a manifestation of unresolved trauma. The Polyvagal Theory suggests that through the physical state of safety, the body is more likely to access states conducive to healing trauma (example working with embodied experiences here and now).

In summary, The Polyvagal Theory offers a framework for comprehending and addressing the physiological mechanisms underlying trauma-related nightmares. By incorporating these principles, Embodied Reprocessing™ furnishes therapists with clear guidelines for initial sessions, planning, and contracting work, starting with a focus on managing insomnia.
When processing nightmares in passive versus active survival modes, different approaches can be used to address the underlying trauma response associated with each state. Here's a breakdown of the differences in processing nightmares in these two survival modes:

1.Nightmares in Passive Survival (PTSD/CPTSD) Characteristics:
In passive survival, nightmares are often a chronic manifestation of past trauma. The client may feel overwhelmed, frozen, or disconnected, and their body is in a state of hypo-arousal.

Managing and Processing Approach:

- Grounding and Stabilisation: Prioritise techniques that help clients reconnect with their bodies gently, such as grounding exercises or sensory anchors (e.g., tactile or proprioceptive cues) to counteract the sense of dissociation.
- Slow Sensory Integration: Since sensory processing is often disrupted, reprocessing is introduced slowly. Encourage clients to explore sensations connected to safety, such as warmth or supportive pressure, helping them associate bodily sensations with security.
- Embodied Processing of Chronic Stress: For chronic stressors, help clients process specific sensory details linked to the nightmare (e.g., sounds or images) in a controlled way. Practising embodied safety responses - like gentle movement or orienting - can help shift the system out of freeze and mitigate the chronic stress response.
- Body Awareness in a Non-Intensive Manner: Help clients track sensations in a neutral part of the body (e.g., hands or feet) to avoid triggering intense memories. Passive survival states often require gentle reconnection to avoid overwhelming the client's system.

2. Nightmares in Active Survival (Recent or Acute Stress)
Characteristics: In active survival, nightmares are often related to recent stressful events and reflect a hyper-arousal state. Here, clients might feel more agitated, hypervigilant, and energized.

Managing and Processing Approach:
- Discharge and Release: Encourage movement or expressive exercises, like shaking or stretching, to release built-up tension. Active survival modes can benefit from exercises that allow the client to let go of excess energy safely.
- Calming Sensory Reprocessing: Hyper-arousal from recent stressors can make clients more sensitive to external stimuli. Use calming sensory inputs, such as rhythmic breathing or sounds, to counterbalance the body's heightened arousal.
- Embodied Processing of Immediate Stress: For recent stressors, help clients process specific sensory details linked to the nightmare (e.g., sounds or images) in a controlled way. Practising embodied safety responses—like softening the body or exhaling slowly—can mitigate the acute stress response.
- Grounding Through Present-Moment Awareness: Use grounding techniques that emphasise the connection to the present to shift focus away from the recent stressful events of the nightmare.

2.4. Understanding Nightmare Recovery: Herman/Piaget's Three-Stage Model
Herman/Piaget's three-stage model (Herman, 1992) of trauma recovery is another valuable concept that was integrated by Embodied Reprocessing™ when addressing nightmares. Each stage of the model offers distinct therapeutic goals, interventions and considerations tailored to treating trauma-related nightmares:

1. **Stage 1: Safety and Stabilisation**
Objective: To make clients feel safe in their life environment and within themselves. The aim of this stage is to help clients develop coping skills to manage their emotional and physical responses. Clients are helped to establish a routine in their daily lives, which helps them feel able to engage in deeper work. This will reduce the impact of nightmares.

2. **Stage 2: Remembrance and Mourning**
Objective: Process the traumatic memories through compassionate acceptance. In this stage, the focus shifts to actively working through the traumatic content of nightmares. Through the controlled and safe re-processing of traumatic events (often the content of nightmares), clients can begin to integrate these experiences into their narrative in a healthier way (Athena, 2011)

3. **Stage 3: Reconnection and Integration**
Objective: Rebuild the clients' connection with themselves and in their personal and professional contexts and integrate their new post-trauma identity.

This final stage helps clients re-establish trust in themselves and others, which is essential for those whose nightmares have isolated them or distorted their view of reality. Working with embodied experiences foster positive relationships, enhance self-esteem, and encourage healthy lifestyle changes. Therapists support clients to transfer their learnings to their social interactions and reduce the recurrence of nightmares by resolving psychosocial conflicts.

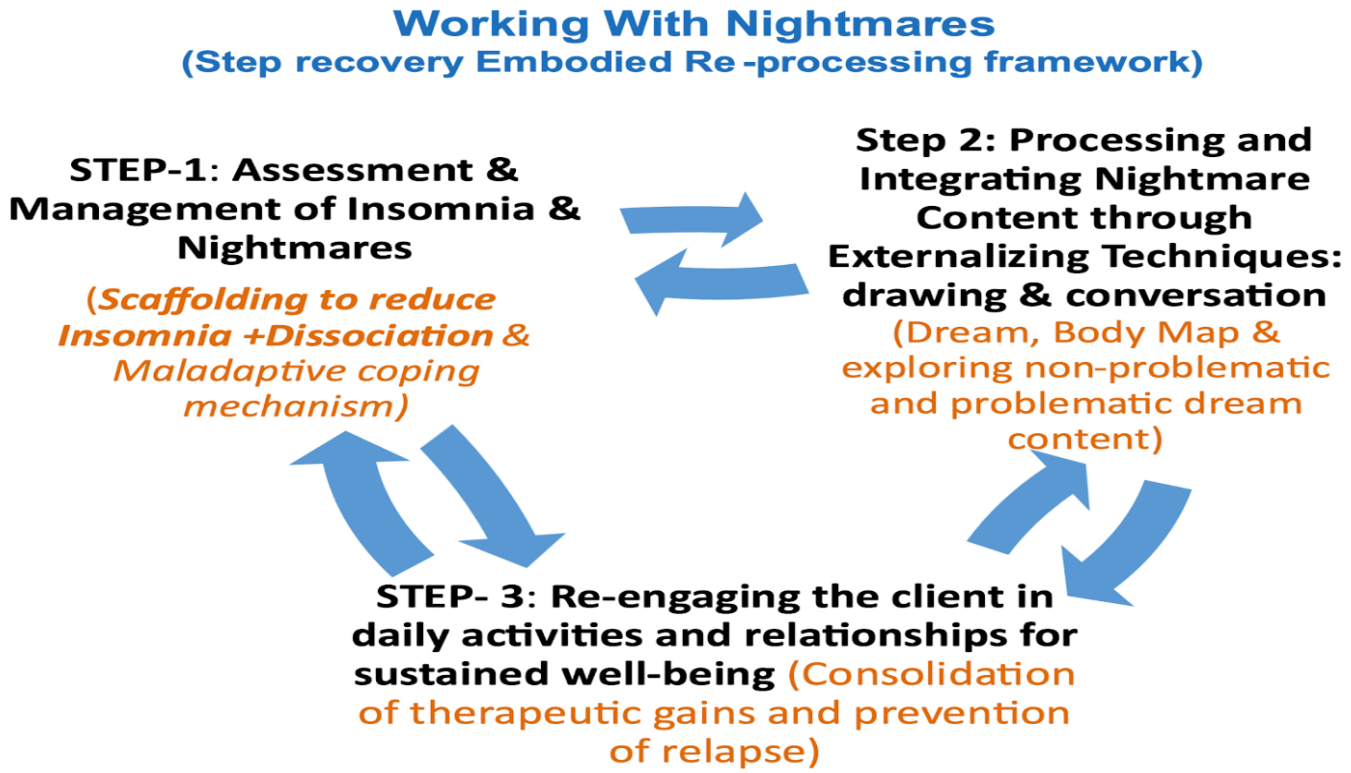
2.5. The Embodied Mind theory
Embodied Mind philosophical ideas, notably those developed by Varela and other scholars (Varela, Thompson & Rosch, 1991), are incorporated into the clinical method known as Embodied Reprocessing. These ideas stress the importance of the interconnectedness of mind, body and the environment. Consciousness and perception are deeply rooted in physical and experiential experiences. Embodied Reprocessing incorporates these ideas into a structured manualised treatment specifical-

ly designed to address and alleviate the distress caused by nightmares.

This method leverages the understanding that nightmares, as embodied experiences, can be re-processed through techniques that engage both the cognitive and physical aspects of the individual's experience. Trauma can also impact an implicit memory stored within the body – which is also unconscious and generally operates when you are exposed to certain triggers in the environment. Explicit memory is the kind of memory that you must consciously think about, like remembering someone's name or address or an exam question. It does not operate automatically and can be searched for in a conscious way.

Now, if you can change the implicit memory into an explicit memory – by using body sensation and felt senses, you can gain a bit more control over the unconscious aspect of it (Van der Kolk et al. I 1984, 2006). Once the implicit has become explicit, you become aware of where the unconscious aspect came from, and this gives you awareness and choices of what to do next. Working with the body and the sensations and feelings that emerge can eventually help remove or make the hidden unconscious body memories easier. Embodied reprocessing is essentially reshaping or altering the implicit body memories and creating a way of transforming them by bringing them into conscious awareness.

3. A short introduction to a clinical Implementation of Embodied Reprocessing™



Step 1: Initial Assessment, management of insomnia and Nightmares and intervention for internal and external safety (Herman, 1992; Schauer & Elbert, 2010; Miller & McIntosh, 2006; Pagel & Kwiatkowski, 2010).

Step 2: Integration of nightmare content by facilitating externalising interventions (drawing and conversation). This step also involves assessing the client's readiness to confront and process distressing episodes through the externalisation process (Herman, 1992; Agarkov, 2011; Gendlin, 1986; Garfield, 1974; Hartmann, 2001).

Step 3: Consolidate therapeutic gains and prevent relapse while re-engaging the client in daily activities and relationships for sustained wellbeing (Herman, 1992; Tedeschi & Calhoun, 1996; Wilmer, 1996).

People who suffer from nightmares often have difficulty in engaging in everyday life and become isolated. Their roles within their community and their personal relationships often break down. This is, therefore a crucial stage, where clients can be supported to reconnect with themselves, establishing a sense of self-worth. From this stage, the therapist can help them gradually to reintegrate into their community settings and into their family and work life.

It is important that this process engages clients in community-based recovery. The goal of therapy is not only personal but the ability to engage in meaningful relationships. They will have learned coping strategies for use in their daily social interactions which will help with their emotional stability and their connection with the world around them. The resolution of deeper psychosocial conflicts will strengthen their ability to engage in supportive relationships, which is a key to long-term healing. These interactions will reduce the recurrence of nightmares.

Conclusion

Embodied Reprocessing (Karpuk & Dawson, 2012; Karpuk, Stoneham, & Davies, 2019, 2021), a clinical short-term therapy method for treating nightmares, is grounded in several key theoretical concepts where the Cultural-Social Model (CSM) was most influenced and helpful in manualising this method. Other concepts include Embodied Mind Theory, Herman/Piaget's Three-Stage Model and Polyvagal Theory. These concepts provide the theoretical underpinnings that inform and shape the Embodied Reprocessing approach, offering a comprehensive framework for understanding and addressing nightmares in clinical practice.

Corresponding Author:
Dzmitry Karpuk
E: dzmitry.karpuk@complextraumainstitute.org
Systemic Family Psychotherapist
Complex Trauma Institute

References

Agarkov, V. (2011). Operative thinking in traumatic dreams: a step in posttraumatic recovery of capacity to symbolize. *IPSO Journal,* pp. 54–60.

Androutsopoulou, A. (2011). Red Balloon: Approaching dreams as self-narratives, Training and Research Institute for Systemic Psychotherapy and Private Practice, *Journal of Marital and Family Therapy*, 37(4), pp. 479–490

Ellis, L. A. (2014). Stopping the Nightmare: An Analysis of Focusing Oriented Dream Imagery Therapy, For Trauma Survivors with Repetitive Nightmares. Doctoral Thesis Submitted to the Faculty of The Chicago School of Professional Psychology.

Emmerich, T. (2017). Translational Biomarker Research for Militarily Relevant Populations in Neurocognitive Diseases. PhD thesis The Open University. https://doi.org/10.21954/ou.ro.0000bf183.

Escamilla, M., LaVoy, M., Moore, B. A. and Krakow, B. (2012). Management of posttraumatic nightmares: a review of pharmacologic and nonpharmacologic treatments since 2010. *Current Psychiatry Reports*, pp. 1–7.

Freud, S. *The Interpretation of Dreams.* (1900) Translated by James Strachey. Hogarth Press.

Foa, E. B., Keane, T. M. and Friedman, M. J. (Eds.) (2009). *Effective treatments for PTSD: practice guidelines from the International Society for Traumatic Stress Studies.* New York, NY: Guilford.

Garfield, P. (1974). *Creative Dreaming: Plan and control your dreams for a more sensuous, more creative and anxiety-free life.* Ballantine Books.

Garfield, P. (1974). *The 13th Man: A New Approach to Psychology and Psychotherapy.* Harper & Row.

Gendlin, E. T. (1986). *Let your body interpret your dreams.* Illinois: Chiron Publications.

Hartmann, E. (2001). *Dreams and nightmares: the origin and meaning of dreams.* Cambridge: Perseus Publishing.

Herman, J. L. (1992). *Trauma and Recovery: The Aftermath of Violence—From Domestic Abuse to Political Terror.* Basic Books.

Karpuk, D., Stoneham, T. and Davies (2019) Nightmares and trauma: From narrative to embodied reprocessing. *Context*, pp. 36-39

Karpuk, D., and Dawson, C. (2012). Working with nightmares and dreams by using embodied reprocessing. Unpublished handout.

Koffel, E., Khawaja, I. S. and Germain, A. (2016). Sleep disturbances in posttraumatic stress disorder: Updated review and implications for treatment. *Psychiatric Annals*, 46(3), 173–176. https://doi.org/10.3928/00485713-20160125-01

Lanius, R. A., Williamson, P. C., Densmore, M., Boksman, K., Gupta, M. A., Neufeld, R. W and Menon, R. S. (2001). Neural correlates of traumatic memories in posttraumatic stress disorder: a functional MRI investigation. *American Journal of Psychiatry*, 158 (11), pp. 1920–1922.

Lavie, P., and Kaminer, H. (1991). Dreams that poison sleep: dreaming in Holocaust survivors. *Dreaming*, 1, pp. 11–21.

Loftus, E. (1996). Memory Distortion and False Memory Creation. *Bulletin of the American Academy of Psychiatry and the Law*, 24(3), pp. 281–295. Retrieved from: http://cogprints.org/599/1/199802009.html.

Lee, K. A., Vaillant, G. E., Torrey, W. C. and Elder, G. H. (1995). A 50-year prospective study of the psychological sequelae of World War II combat. *American Journal of Psychiatry*, 152(4), pp. 516–522.

Mellman, T. A., David, D., Bustamante, V., Torres, J. and Fins, A. (2001). Dreams in the acute aftermath of trauma and their relationship to PTSD. *Journal of Traumatic Stress*, 14(1), 241–247.

Miller, L. J., and McIntosh, D. N. (2006). Sensory Diets: A Comprehensive Approach to Sensory Integration Therapy. In R. L. McClure (Ed.), *The Sensory Integration and Praxis Tests (SIPT) Manual* (pp. 199–218). Western Psychological Services.

Nisha, A. R. et al. (2010). Best Practice Guide for the Treatment of Nightmare Disorder in Adults, *J Clin Sleep Med*, 6(4), pp. 389–401.

Pagel, J. F. and Kwiatkowski, C. (2010). The nightmares of sleep apnea: Nightmare frequency declines with increasing apnea-hypopnea index. *Journal of Clinical Sleep Medicine: JCSM: official publication of the American Academy of Sleep Medicine*, 6(1).

Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation*. W. W. Norton & Company.

Rosen, M. (2013). What I make up when I wake up: anti-experience views and narrative fabrication of dreams. *Frontiers in Psychology*, 4(514), pp. 1–15. doi:10.3389/fps.2013.00514

Schauer, M. and Elbert, T. (2010). Dissociation Following Traumatic Stress Etiology and Treatment, *Journal of Psychology*, 218(2), pp. 109–127

Spoormaker, V. I. and Montgomery, P. (2008). Disturbed sleep in posttraumatic stress disorder: secondary symptom or core feature? *Sleep Medicine Review*, 12, pp. 169–184.

Stoneham, T. (2019). "Dreaming, Phenomenal Character, and Acquaintance" in Acquaintance; New Essays eds. J. Knowles and T. Raleigh. Oxford: Oxford University Press: pp. 145–168.

Stoneham, T, Davies R. & Karpuk, D. (2021). Nightmares, trauma, and the orthodoxy of narrative, *Perspectives on Trauma*, pp. 12–32.

Silber, M. H. (2013) Sleep-related movement disorders. *Continuum (Minneap Minn)*, 19(1 Sleep Disorders), pp. 170-84.

Tedeschi, R. G. and Calhoun, L. G. (1996). The posttraumatic growth inventory: measuring the positive legacy of trauma. *Journal of Traumatic Stress,* 9, pp. 455–471.

Van der Kolk, B., Blitz, R., Burr, W. Sherry, S. and Hartmann, E. (1984). Nightmares and trauma: A comparison of nightmares after combat with lifelong nightmares in veterans. A*merican Journal of Psychiatry*, 141, pp. 187–190.

Van der Kolk, B. A. (2006). Foreword. In P. Ogden, K. Minton, & C. Pain (Eds.), Trauma and the body: A sensorimotor approach to psychotherapy (pp. xvii–xxvi). New York / London: W.W. Norton.

Varela, F. J., Thompson, E. and Rosch, E. (1991). *The Embodied Mind: Cognitive Science and Human Experience.* MIT Press.

Walker, M. P. (2009). The role of sleep in cognition and emotion. *Annals of the New York Academy of Sciences*, 1156(1), pp. 168–197.

Wilmer, H. A. (1996). The healing nightmare: war dreams of Vietnam veterans. In D. Barrett (Ed.) *Trauma and dreams*, pp. 85-99. Cambridge, MA & London: Harvard University Press.